N.Y.C. 1140

Lima Locomotive Works Incorporated

LIMA, OHIO, U. S. A.

Locomotive Tender

New York Central

CARD INDEX

Class 10000 Gal. 8-Wheel. Dept. Engineering

ORDER No.	SHOP NUMBERS	DATE	DRAUGHTSMAN
C. O. 1140	7671-7720	4- 1937	U-3-K.
		19	
		19	
		19	
		19	

FORM LED 32

1140 N.Y.C

ADDITIONS AND CHANGES

ADDITIONS TO BE MADE IN BLACK INK AND CHANGES IN RED INK

Date	ITEMS	Check		Date	ITEMS	Check
			+			
12-31-36	7-46.47.48,51.53,54,55,59.61					
1-5-37	5-38		+			
1-5-37	11-5.6.	"	+			
1-6-37	9-44	"	✓			
1-7-37	5-38	"	✓			
1-7-37	12-33		✓			
1-9-37	10-47.48.49	"	✓			
1-9-37	11-3.4	"	✓			
1-9-37	3-31.46.47.48.	"	✓			
1-11-37	10-28-55	"	✓			
" "	15-1	"	✓			
1-12-37	3-53	"	✓			
1-12-37	11-7	"	✓			
1-12-37	12-48	"	✓			
1-22-37	4-9	"	✓			
1-22-37	8-3	"	✓			
1-22-37	7-50	"	✓			
1-26-37	3-53	"	✓			
2-3-37	10-13.	"	✓			
2-5-37	11-53.54	"	✓			
2-12-37	15-26 to 36 inc	"	✓			
2-12-37	3-5.6.7.8.9.	"	✓			
2-12-37	5-30	"	✓			
2-25-37	5-42	"	✓			
2-27-37	5-31	"	✓			
2-27-37	5-35.36	"	✓			
3-2-37	2-30.31.32.33	"	✓			
3-18-37	3-10	"	✓			
3-20-37	10-26	"	✓			
3-23-37	11-41	"	✓			
3-24-37	11-48	"	✓			

2 copies made 4-37 for NYC RR.
1 Tape copy " " " "

..., Shaking Plate, Coupler and Rigging, Drawhead F. and B.

87 Tender Deck, Tool Box, Water Cooler.

88 Tender Tank—Water and Oil, Coal Gate, Coal Pusher, Filling Hole and Tank Funnel.

89 Tender Truck, Bolster and Guides, Spring Seats and Plank.

90 Tender Water Scoop—Arrangements and Details.

Tires—See 95.

Tool Boxes—See 87.

95 Wheels and Tires.

97 Preliminary Designs and Propositions.

98 Clearances and Wheel Base Diagrams.

99 Miscellaneous.

E. D. 257.

76

LIMA LOCOMOTIVE WORKS, INCORPORATED ORDER No. 1115

ENGINEERING DEPARTMENT

CALCULATIONS

MADE BY R.S. 8/16/29 CHECKED BY _____ ELEVATION MAN _____

TENDER SPRINGS

ESTIMATED WEIGHT OF TENDER = 187,800#
MAX. REAR TRUCK = 94,400#

SPRINGS TO LIMA CARD 762-A-191

3 double elliptic springs each nest, 2 nests per truck
springs 9 plates $4\frac{1}{2}'' \times \frac{7}{16}''$ - 26" ctrs.

$393 \times 9 \times 4\frac{1}{2} \times 3 = 47{,}700$# capacity each nest
47,700
95,400# spring capacity each truck

DEAD WTS.
WHEELS - 5400
AXLES - 1900
BOXES - 600
SPRING PLANK 1200
7100

94,400
7100
87,300# load on 2 nests

$\frac{95{,}400}{87{,}300} = 109\%$ (Capacity % of load)

86 Tender Drawgear—Buffer, Chafing Plate, Coupler and Rigging, Drawhead F. and B.
87 Tender Deck, Tool Box, Water Cooler.
88 Tender Tank—Water and Oil, Coal Gate, Coal Pusher, Filling Hole and Tank Funnel.
89 Tender Truck, Bolster and Guides, Spring Seats and Plank.
90 Tender Water Scoop—Arrangements and Details.
Tires—See 95.
Tool Boxes—See 87.
95 Wheels and Tires.
97 Preliminary Designs and Propositions.
98 Clearances and Wheel Base Diagrams.
99 Miscellaneous.

2 copies made 4-29 for NYC RR
1 Tipe copy " " " "

ND CHANGES

CK INK AND CHANGES IN RED INK

Date	ITEMS	Check

SCHEDULE	DEPT.	DATE SENT	DATE APPROVED	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		12/9			GROUP 11—AXLES								
D		12-17		1	Axle 6"x11"	4	112 A 182	ord	—	—	—	—	—
				2	"								
D			✓	3	" Marking		112 A-112	—	—	—	—	—	—
				4									
				5									
				6									
				7									
				8									
				9									
				10									
				11									
				12									
				13	GROUP 15—BOLTS AND NUTS								
				14									
				15									
				16									
				17									
				18									
				19									
				20									
				21									
				22									
				23									
				24									
				25	GROUP 17—BOXES, TRUCK								
D		12/7	12/18	26	Box & Lid	8	Symington Gould Corp	Box P-53-3-B Lid ord B-P-314 B	—	—	—	—	—
				27	" Lid								
				28	" " Pin								
				29	" " Spring								
D		12/7	12/18	30	" Journal Brass 6"x11" AAR	8	Johnson Bronze Co	ord	—	—	—	—	—
D		12/7	12/18	31	" " Wedge 6"x11	8	AAR Drop Forged	ord	—	—	—	—	—
D		12/7	12/18	32	" Dust Guard	8	AAR Fibre	ord	—	—	—	—	—
D		12/7	12/18	33	" " " Wedges	8	Wood To Suit Boxex		—	—	—	—	—
				34									
				35									
				36									
				37									
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				45	GROUP 35—DIE WORK								
				46									
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				61									

Schedule Dept.	Check	Date Sent	Date Approved	Item	Title	No. Pcs.	Drawing Card No.	Drawing Construct'n Notes	Forgings Sketch No.	Castings—Pattern Numbers Cast Iron	Cast Steel	Brass	Mal. Iron
					GROUP 49—GAUGES, TEMPLATES & JIGS								
				1									
				2									
				3									
				4									
				5	Group 53 Handrail & Steps								
		2/8	12/10	6	Steps, Back	2	863 A 96	4 Tenders	Wood. Mat'l. Ord	—	—	—	—
		2/8	2/10	7	Back Step Hanger. Outside	2	"	4 "	53 C-48	—	—	—	—
		2/8	2/10	8	" " " Inside	2	"	4 "	53 D-108	—	—	—	—
		2/8	2/10	9	" " Risers	2	"	4 "	½"x2"x23"	—	—	—	—
		2/8	2/10	10	Bumper Handle Complete with Brace	1	"	4 "	53 A-337	—	—	—	—
				11									
				12									
				13									
				14									
				15									
				16									
				17									
				18									
				19									
				20									
				21	GROUP 53—HANDRAIL AND STEPS	—							
				22	Handrail	—							
				23	"	—							
				24	" Column	—							
				25	" "	—							
				26	" "	—							
				27	" Ball	—							
				28	" Flange	—							
				29	" "	—							
				30									
		12/18	1/7	31	Bumper Handle Complete with Brace	1	863 A 95	46 Tenders	53 A 337	—	—	—	—
				32	" "								
		12/9	12-17	33	Tank " R L	1 1	532 C-567	—	532C-567	—	—	—	—
		12/9	12-17	34	" " Front Leg R L	1 1	532-D-567	—	532 D-567	—	—	—	—
				35	" "								
				36	" "								
				37									
				38									
				39									
				40									
				41									
				42									
		12/9	12-17	43	Steps—Front	2	532A 3	—	—	53-154	—	—	—
				44	Front Step Hanger								
				45	" " Brace								
		12/18	1/7	46	Steps—Back	2	863 A 95	46 Tenders Wood. Ord	—	—	—	—	—
		12/18	1/7	47	Back Step Hanger, Outside	2	"	46 Tenders	53C-48	—	—	—	—
		12/18	1/7	48	" " ~~Brace~~ Hanger, Inside	2	"	46 Tenders	53-D-108	—	—	—	—
				49	Tank Step								
				50	" "								
		12/9	12-17	51	Tank Ladder—Outside	1	532A590	—	532A590	—	—	—	—
				52	" " —Inside								
		12/18	1/7	53	Back Step Risers	2	863 A 95	½"x ~~23~~ 2"x23 "x ~~2~~ " steel	46 Tenders				
				54									
				55									
				56									
				57									
				58									
				59									
				60									
				61									

Schedule Dept.	Date Sent	Date Approved	Item	Title	No. Pcs.	Drawing Card No.	Drawing Construct'n Notes	Forgings Sketch No.	Castings—Pattern Numbers Cast Iron	Cast Steel	Brass	Mal. Iron
				GROUP 54—HEADLIGHTS AND SIGNAL ATTACHMENTS								
			1	Signal Fixtures—Location								
D	12/20	12-17	× 2	Flag Socket	2	542 B-256	—	—	—	—	54-14	—
D	12/20	12-17	× 3	Marker Bracket	2	542 A-339	—	—	—	—	54-1	—
			4	Lamp Bracket								
			5	" Hook								
			6	Pail Hook								
			7	Headlight Bracket								
			8	" Shelf								
D			9	Electric Wiring		N.Y.C. Print 8074 E	Matl. Ord	—	—	—	—	—
			10	License Plate								
			11	Ownership Plate								
			12	Patent "								
D	12/19	12-17	× 13	Conduit Clamps	5	542 D-124	—	542 D-124	—	—	—	—
D	12/19	12-17	× 14	" "	4	542 N-124	—	542 N-124	—	—	—	—
D	12/19	12-17	× 15	" " Blocks	4	542 P-124	Welded to Tank	542 P-124	—	—	—	—
D	12/19	12-19	× 16	Headlight Conduit Conn Box Support	1	542 B-370	—	542 B-370	—	—	—	—
			17									
			18									
			19									
			20									
			21	**GROUP 57—LAGGING AND JACKET**								
			22	Steam Pipe Lagging								
			23	" " "								
			24	" " Jacket								
			25									
			26									
			27									
			28									
			29									
			30									
			31									
			32									
			33	**GROUP 59—OIL AND GREASE CUPS**								
			34	Truck Oil Cup								
			35	" " " Cap								
			36									
			37	Stoker Oil Cup								
			38	" " " Cap								
			39									
			40									
			41									
			42									
			43									
			44									
			45									
			46									
			47									
			48									
			49	**GROUP 61—PA'TING, LET'RING & NUM'G**								
			50	Tender Lettering								
			51									
			52									
			53									
			54									
			55									
			56									
			57									
			58									
			59									
			60									
			61									

Schedule Dept. Date Sent Date Approved	Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
			GROUP 62—PILOT AND SNOW PLOW								
		1	Pilot								
		2	" Band								
		3	" Brace								
		4	" "								
		5	" Bottom Plate								
		6	" Bracket								
		7	" Corner Iron								
		8	" Knee								
		9									
		10									
		11									
		12									
		13	Snow Plow								
		14									
		15									
		16									
		17									
		18									
		19									
		20									
		21	**GROUP 63—PIPE FITTINGS AND CLAMPS**								
		22	Box Cooler Hose								
		23	" " Fitting								
		24	" " " Nut								
		25	" " " Swivel								
D	12/10 12-17	26	Pipe Clamp. U. Bolt	1	648 D-11	—	63 N-33	—	—	—	—
D	" 12-17	27	" " 1¼"	2	"	—	63 B-63	—	—	—	—
D	" 12-17	28	Pipe Clamp ¾	1	"	—	63-C-63	—	—	—	—
D	" 12-17	29	" " 3/4 x 1/4	1	"	—	63 A-64	—	—	—	—
D	" 12-17	30	" "	2	"	—	63 E-63	—	—	—	—
D	" 12-17	31	" "	2	648 A-48	—	63 M-63	—	—	—	—
D	" 12-17	32	" Hanger	2	648 D-11	—	63 N-28	—	—	—	—
D	" 12-17	33	" "	1	"	—	63 P-28	—	—	—	—
D	" 12-17	34	" "	1	"	—	63 R-28	—	—	—	—
		35	" # Clamp Filler Block	2	648 A 48	7/8 x 2" x 2¾"	—	—	—	—	—
		36	" ~~Manifold Air Brake~~ "	1	"	5/8" x 2" x 2½"	—	—	—	—	—
D	12/10 12-17	37	" Angle Cock Holder	1	648-D-11	—	63-A-243	—	—	—	—
D	" 12-17	38	" Manifold Support	1	642 ~~B~~ D-131	5"x3"x½" Angle R.S. only		—	—	—	—
		39	" " "								
		40									
		41	Water Joint Support								
D	12/10 12-17	42	Pipe Clamp (Sprinkler)	2	648 A 48	—	63 ~~D~~ B-96	—	—	—	—
D	" 12-17	43	" " (")	2	"	—	63 A-25	—	—	—	—
D	" 12-17	44	" Hanger (")	2	"	2½x2½x3/8" Angle	—	—	—	—	—
D	" 12-17	45	" " (")	2	"	—	63 A 24	—	—	—	—
D	" 12-17	46	Sprinkler Hose	1	"	3/8" I.D. 96" Long std	—	—	—	—	—
D	" 12-17	47	" " coupling	1	"	—	—	—	—	Stck	—
D	" 12-17	48	Pipe Clamp	1	"	—	63 A 40	—	—	—	—
		49									
		50	**GROUP 64—PIPING ARRANGEMENTS**								
D	12/10 12-17	51	Piping Arrangement Air Brake		648 D-11	Style 3	—	—	—	—	—
		52									
D	12/10 12-17	53	Sprinkler Piping		648 A 48	F.R.S C-21224 H.	—	—	—	—	—
D	" 12-17	54	" Pipe Flange	1	642 A 85	—	—	64-1	—	—	— 12/18 12/23
		55	Steam Heat Piping								
		56									
		57	Coal Pusher Piping								
		58									
		59									
		60									
		61									

SCHEDULE DEPT.	DATE SENT	DATE APPROVED	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
				GROUP 66—PLUGS, HANDHOLES AND WASHOUTS								
			1									
			2									
			3									
			4									
			5									
			6									
			7									
			8									
			9	**GROUP 71—RUN'G BOARDS & BRACK'TS**								
			10	Running Board								
			11	" "								
			12	" " Bracket								
			13	" " "								
			14	" " "								
			15	" " "								
			16									
			17									
			18									
			19									
			20									
			21	**GROUP 73—SAND BOX AND RIGGING**								
			22	Sand Box								
			23	" " Brace								
			24	" " Handle								
			25									
			26									
			27									
			28									
			29	**GROUP 76—SPRINGS**								
D	12/10	12-17 ×	30	Truck Spring	4	762 A-191 ✓		ord				
D	12/10	12-17 ×	31	" " Marking		762 A 190 ✓						
			32	" " Clip								
			33	" " End Block								
			34	Buffer Spring								
			35	Coupler Spring								
			36	Draw Spring								
			37	" "								
			38	Water Scoop Spring								
			39	" " "								
			40	Brake Beam Leveling Spring								
			41									
			42									
			43									
			44									
			45									
			46	**GROUP 80—STOKER AND DETAILS**								
			47									
			48									
			49									
			50									
			51									
			52									
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			54									
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			60									
			61									

(Group 80 Continued)

SCHEDULE DEPT.	DATE SENT	DATE APPROVED	Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
					GROUP 80—STOKER AND DETAILS (Cont.)								
				1									
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				43									
				44	GROUP 82—TANK VALVES AND COCKS								
D	12/10	12-17	×	45	Tank Valve	2	822 B-114	—	—	—	—	82-464	—
D	12/24	12-29	✓	46	" " ~~Body~~ Drain Plug	4	822 A 204	—	—	—	—	Stick	—
D	12/24	12-29		47	" " Seat	2	822 A 205	—	—	—	—	82-511	—
D	12/24	12-29		48	" " ~~Shaft~~ Handle Stop	4	822 A 206	Turned From 7/8" Dia. Bar.	—	—	—	—	—
D	12/10	12-17	×	49	" " Hose Clamp	2	822 A 145	—	—	—	82-463	—	—
D	12/24	12-29		50	" " Rod	2	822 A-210	—	822 A 210				
D	12/24	12-29		51	" " ~~Lift~~ Arrangement		822 A-207	—	—	—	—	—	—
D	12/10	12-17	×	52	" " Handle	2	822 A-54	—	—	—	82-183	—	—
D	12/24	12-29		53	" " Gland	2	822 A 206	—	—	—	—	82-176	—
D	12/24	12-29		54	" " Goose Neck	2	822 A 204	—	—	—	82-510	—	—
D	12/24	12-29		55	" " ~~Nut~~ " " Ring	2	"	—	—	—	—	82-180	—
D	12/10	12-17	×	56	" " Sleeve	2	822 D-5	—	—	—	—	82-182	—
D	12/10	12-17	×	57	" " Hose Nut	2	822 E-35	—	—	—	—	55-19	—
				58	" " " Swivel								
D	12/24	12-29		59	Tank Valve Flange Top	2	822 A 206	—	—	82-512	—	—	—
				60	" " "								
D	12/24	12-29		61	" " Strainer	2	822 A 207	Sheet Copper #18 BWG and Punched to Cd 822 B-6		—	—	—	—

(Group 82 Continued)

Schedule Dept	Date Sent	Date Approved	Check	Item	Title	No. Pcs.	Drawing Card No.	Drawing Construct'n Notes	Forgings Sketch No.	Castings—Pattern Numbers Cast Iron	Cast Steel	Brass	Mal. Iron
					GROUP 82—TANK VAL. AND COCKS (Cont.)								
D.	12/10	12-17	x	1	Tank Well	2	822 A 53	3/8" Plate Flanged	—	—	—	—	—
				2	" " Plug								
				3	" ~~Syphon~~ Valve Rod Pin	2	822 A 207	—	82 A 50	—	—	—	—
				4	" " Pipe Support								
D	12/10	12-17	x	5	" ~~Brace~~ Gauge Cock Body	3 ✓	822 A 143	—	—	—	—	82-462	—
D	"	12-17	x	6	" " " Plug	3 ✓	"	—	—	—	—	82-461	—
D	"	12-17	x	7	" " " Nut	3	"	—	—	—	—	1/4 Hex	—
D.	"	12-17	x	8	" " " Washer	3	"	—	—	—	—	Stick	—
				9	Oil Tank Plug								
				10	" " Valve								
				11	" " " Seat								
				12	" " " Rod								
				13	" " " Arm								
				14	" " " Gland								
				15	" " "								
				16	" " " Nut								
				17	" " " Sleeve								
				18	" " " Drain								
				19	" " " " Seat								
				20	" " " Stuffing Box								
				21	" " " " " Nut								
				22	" " " " " Gland								
				23	" " " Rod End								
				24	" " Measuring Rod								
				25	Oil Tank Cock								
				26	" " " Cap								
				27	" " " Plug								
				28	" " " Nut								
				29	" " " Washer								
				30	" " " Handle								
				31	Tank Cock								
				32	" " Plug								
				33	" " Nut								
				34	" " Washer								
				35	" " Handle								
				36	" " Flange								
				37	" " Rod								
				38	" " Stuffing Box								
				39	" " " " Gland								
				40	" " " " Nut								
				41	Box Cooler Valve								
				42	" " " Cap								
				43	" " " Stem								
				44	" " " Gland								
				45	" " " Nut								
				46	" " " Handle								
				47	" " " Coupling Nut								
				48	" " " Swivel								
				49									
				50	**GROUP 84—TENDER BRAKE**								
D	12/10	12-17	x	51	Frame Body Brake Arrangement		859 A 89	—	—	—	—	—	—
D	"	12-17	x	52	Body Brake Lever	2	"	—	84 B-8	—	—	—	—
				53	" " "								
D	"	12-17	x	54	" " " Support	3	"	—	84 K-4	—	—	—	—
				55	" " " "								
D.	"	12-17	x	56	" " Connecting Rod Cyl	1	"	—	84 A 6	—	—	—	—
D	"	12-17	x	57	" " " " Tr R L	1/1	"	—	84 A 5	—	—	—	—
				58	" " Equalizer	—							
				59	" " Fulcrum	—							
				60	" " Rod	—							
				61	" " Clevis	—							

(Group 84 Continued)

SCHEDULE DEPT.	DATE SENT	Check	DATE APPROVED	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
					GROUP 84—TENDER BRAKE (Cont.)								
				1	Body Brake Sheave								
				2	" " " Support								
				3	" " Shaft								
				4	" " " Cap								
				5	" " " Hanger								
				6	" " " Step								
				7	" " " Wheel								
				8	" " " Handle								
				9	" " " Pawl								
				10	" " " " Plate								
				11	" " " Ratchet								
				12	" " " Weight								
D	12-10	12-17		13	" " Cylinder	1	859 A 39	14"x12" ord	—	—	—	—	—
				14	" " " Head								
				15	" " " "								
				16	" " " Support								
D	12-10	12-17		17	" " Pins Tr. Conn	2	842 A 38	—	—	—	—	—	—
D	"	12-17		18	" " " Push Rod	1	842 B-38	—	—	—	—	—	—
D	"	12-17		19	" " " Cyl "	2	842 F-38	—	—	—	—	—	—
D	"	12-17		20	" " " " Ful	1	842 Z-37	—	—	—	—	—	—
				21	Tender Brake Piston								
				22	" " " Follower								
				23	" " " Ring								
D	12-10	12-17		24	" " " Rod	1	842 K-36	—	842 K-36	—	—	—	—
				25	Brake Reservoir Hanger								
				26	" " Strap								
				27	Hand Brake Arrangement								
				28	" " Rod								
				29									
				30									
				31									
				32									
				33									
				34									
D	12-10	12-17		35	Truck Brake		894 A 12	—	—	—	—	—	—
D	"	12-17		36	" " Beam	R L 2 2	"	Buffalo # 8-946 ord		—	—	—	—
				37	" "								
				38	" "								
D	12-10	12-17		39	" " " Support	8	842 A 2	—	842 A 2	—	—	—	—
D	"	12-17		40	" " " Safety Chain	4	894 A 12	1/2" Chain Ord	84 A 125	—	—	—	—
D	"	12-17		41	" " " " Bar	4	"	3"x3"x3/8" Angle	—	—	—	—	—
				42	" " " Leveling Eyebolt								
	12			43	" " Head								
	12-10	1-4		44	" " Shoe	8	A.B.S. & Fdry Co	ord	—	—	—	—	—
	"			45	" " " Key	8	A A R Std	ord	—	—	—	—	—
D	"	12-17		46	" " Beam Safety Support	R L 2 2	894 A 12	—	84 A-108	—	—	—	—
D	"	12-17		47	" " Lever	2	842 A-19	—	842 A 19	—	—	—	—
				48	" " " Guide								
D	"	12-17		49	" " Dead Lever	2	842 A 19	—	842 A-19	—	—	—	—
D	"	12-17		50	" " " " Anchor	2	894 A 12	—	84 A 3	—	—	—	—
D	"	12-17		51	" " " " " Lug	R L 1 1	"	Asf Pmts 7091 7734 ord	—	—	—	—	—
D	"	12-17		52	" " Lever Rod	2	842 C-89	—	842 C-89	—	—	—	—
				53	" " " "								
D	"	12-17		54	" " Pins Brake Beam Support	8	894 A 12	—	84 A 42	—	—	—	—
D	"	12-17		55	" " " Dead Lever	8	842 A 38	—	—	—	—	—	—
D	"	12-17		56	" " " Tr. Conn	2	842 K-38	—	—	—	—	—	—
D	"	12-17		57	" " " Bottom Rod	4	842 D-37	—	—	—	—	—	—
D	"	12-17		58	" " " Br Beam Ful	4	842 Y-37	—	—	—	—	—	—
D	"	12-17		59	" " " Safety Chain	4	842 R-38	—	—	—	—	—	—
				60									
				61									

Schedule Dept.	Date Sent	Date Approved	Item	Title	No. Pcs.	Drawing Card No.	Drawing Construct'n Notes	Forgings Sketch No.	Castings—Pattern Numbers Cast Iron	Cast Steel	Brass	Mal. Iron
				GROUP 85—TENDER FRAME								
B	12/10	12-17	1	Frame	1	859 A 39	GSC. # 21413	12/9	—	—	—	—
			2	" Center Sill								
			3	" Side Sill								
			4	" End Sill								
			5	" Corner Angle								
			6	" " Bracket								
			7	" " Knee								
			8	" Brace								
			9	" "								
			10	" "								
			11	" Filling								
			12	" "								
D	12/10	12-17	13	" Tank Stop	2	852 C-66	—	—	85-117	85-117	—	—
			14	" Bolster								
			15	" " Angle								
			16	" " Plate								
			17	" " Truss Bar								
			18	" " " Brace								
			19	" " " Plate								
			20	" "								
			21	" " Tie Plate								
D	12/10	12-17	22	" Center Plate	2	859 A 39	GSC G201634	12/9	—	—	—	—
D	"	12-17	23	" Side Bearing	4	852 B-64	—	—	—	85-118	—	—
			24	" " "								
D	12/10	12-17	25	Push Pole	1	852 B-65	Douglas Fir. ord	—	—	—	—	—
D	"	12/19	26	" " Collars	2	"	—	—	—	85-119	—	—
D	"	12-17	27	" " ~~Pocket~~ Stop	R 1 / L 1	852 A 44	—	—	—	85-18 / 85-19	—	—
D	"	"	28	" " Support	2	859 A-39	—	4605-200	—	—	—	—
			29	" " Stop								
D	"	12-17	30	Wrecking Frog Brackets	4	859 A 39	—	85-B-50	—	—	—	—
			31	Switch Rope Hooks								
			32	Check Chain								
			33	" " Pocket								
			34	" " Hook								
D	12/10	12-17	35	Tender Floor	1	859 A 39	1¾" x 10" Yellow Pine ord	—	—	—	—	—
D	"	12-17	36	" " Edge	2	"	1¾" x 1¾" x ¼" Angle ord	—	—	—	—	—
			37	Bumper—Front								
			38	" —Back								
			39	Tender Floor Anchor								
			40									
			41									
			42									
			43									
			44									
			45									
			46									
D	12/18	1-7	47	GROUP 86—TENDER DRAWGEAR		863 A 95	46 Tenders	—	—	—	—	—
D	12/18	1-7	48	Coupler	1	"	46 Tenders	N.M.C. Pf # 24532 A ord	—	—	—	—
D	12/18	1-7	49	" Pocket	1	"	46 "	" Pf # 20778-A ord	—	—	—	—
			50	" Followers								
			51	" Yoke								
			52	" " Filler								
			53	" Follower Guide								
			54	" Carry Iron								
D	12/18	1-7	55	" Chain	1	863 A 95	46 Tenders N.M.C # 1470 A ord		—	—	—	—
			56	" " Clevis								
D	12/10	12-17	57	Drawbar Pin	1	862 A 2	—	862 A 2	—	—	—	—
D	"	12-17	58	" " Support	1	372 A 10	—	372 A 10	—	—	—	—
			59	Safety Chain Pin								
			60	Draft Gear Cheek Casting								
			61	" " Key								

(Group 86 Continued)

Schedule Dept.	Date Sent	Date Approved	Item	Title	No. Pcs.	Drawing Card No.	Drawing Construct'n Notes	Forgings Sketch No.	Castings—Pattern Numbers Cast Iron	Cast Steel	Brass	Mal. Iron
				GROUP 86—TENDER DRAWGEAR (Cont.)								
			1	Draft Gear Carrier	—							
			2	Drawhead Brace	—							
D	12/18	1/7	3	Uncoupling Shaft R.S.	1	863 A 95	46 Tenders	86 A-135	—	—	—	—
D	12/18	1/7	4	" " ~~Arm~~ L.S	1	"	46 Tenders	86 A-136	—	—	—	—
P	12/18	12/29	5	" " Bracket	4	372 A 433	46 Tenders	—	—	37-436	—	—
P	12/18	12/29	6	" " "	1	372 B-433	46 Tenders	—	—	37-437	—	—
P	12/18	1/7	7	" " ~~Handle~~ Arm.	1	863 A 95	46 Tenders	86 A-137	—	—	—	—
			8	" " Cap								
			9	" " L.S								
			10	Draw Casting—Front								
			11	" " —Back								
			12	Safety Chain								
			13	" " Clevis								
			14	" " Staple								
			15	" " Washer								
			16									
D	12/18	12/23	17	Chafing Casting	1		Franklin Pt C-47903					
			18	" Iron								
			19	Spring Buffer								
			20	" " Case								
	1/11	1/14	21	~~Uncoupling Shaft Handle~~	~~2~~	~~862 A 69~~	~~4 Tenders~~	—	—	~~86-132~~	—	—
	1/11	1/14	22	" " ~~Pal~~	~~2~~	"	4-Tenders	—	—	~~86-132~~	—	—
			23									
			24	For Drawgear & Rear End								
			25	Arrgt For 4 Tenders								
			26	See Page 15								
			27									
			28									
			29									
			30									
			31									
			32									
			33									
			34	**GROUP 87—TENDER DECK AND TOOL BOX**								
D	12/10	12/15	35	Tender Deck	1	872 B-52	Angles & Plate. ord	—	—	—	—	—
D	"	"	36	" " Shovel Plate	1	"	ord	—	—	—	—	—
D	"	"	37	" " Support, Outside R L	1/1	"	3/8" Plate	—	—	—	—	—
D	"	"	38	" " " Inside R L	1/1	"	3/8" Plate	—	—	—	—	—
			39									
			40									
D	12/10	12-17	41	Tool Box	2 ~~1~~	872 A 2	Wood with Hinges & Hasp. ord	—	—	—	—	—
			42	" "								
			43	" " Handle								
			44	" " "								
			45	" " Brace								
			46	" " "								
D	12/10	12/15	47	" Closet Eyebolt	2	889 B-45	—	88 A-196	—	—	—	—
P			48	" Closet ~~Hinge~~ Hasp Pin	2	"	—	87 A 7	—	—	—	—
			49	" " " Lug	—							
			50									
			51									
			52									
D	1/28	2/2	53	Water Cooler	1	872 A 67	Wood, with Hinges & Handles Ord	—	—	—	—	—
P	1/28	2/2	54	" " ~~Base~~ Inside Tank	1	872 A 68	Galv. Iron ord Complete on P.D.	—	—	—	—	—
			55	" " ~~Top~~ Arrangement		872 A 70	—	—	—	—	—	—
			56	" " Lid								
			57	" " Casing								
			58	" " Cock								
			59									
			60									
			61									

Schedule Dept	Date Sent	Date Approved	Check	Item	Title	No. Pcs.	Drawing Card No.	Drawing Construct'n Notes	Forgings Sketch No.	Castings—Pattern Numbers Cast Iron	Cast Steel	Brass	Mal. Iron
					GROUP 88—TENDER TANK								
D	12/10	12/15	×	1	Tank—Water	1	889 B-45	10000 Gallon	—	—	—	—	—
D	"	"	×	2	" Material Bill		88 MO-103-c	—	—	—	—	—	—
D	"	"	×	3	" ~~Brace~~ Washout Plugs	3	889 B-45	Huron. std	—	—	—	—	—
D	"	"	×	4	" ~~Knee~~ " " Liners	3	"	6"x6"x1" Tapped to suit Plugs & Welded on Bottom of Tank				—	—
				5	" Lifter Iron	—							
D	"	"	×	6	" Drain Pipe	2	"	4" Ex. Hvy Pipe std	—	—	—	—	—
D	"	"	×	7	" " " Flange	2	"	8"x8"x1" Soft Steel, Welded to Tank		—	—	—	—
D	"	"	×	8	" " " "	2	"	4" Com. Pipe Flange std		—	—	—	—
D	"	"	×	9	" ~~Fuel Rack~~ Tool Hook	1	"	—	88 A 94	—	—	—	—
				10	" Tool Hook								
D	12/10	12-17	×	11	" Lug	6	882-A-3	—	882-A-3	—	—	—	—
				12	" "								
D	12/10	12-17	×	13	" Funnel	1	882 D-69	1/4" Plate std	—	—	—	—	—
D	"	12-17	×	14	" " Lid	1	"	3/16" " std	—	—	—	—	—
D	"	12-17	×	15	" " Hinge	2	882 B-68	—	—	—	88-94	—	—
D	"	12-17	×	16	" " " Lug	2	882 B-40	—	—	—	88-40	—	—
D	"	12-17	×	17	" " Handle	1	882 A 1	—	—	—	88-8	—	—
D	"	12-17	×	18	" ~~Screen~~ Screen	1	882 A-103	Draftac #393 std	—	—	—	—	—
D	"	12-17	×	19	" Coal Gate	1	883 A 53	Wood & Plate	—	—	—	—	—
D	"	12-17	×	20	Coal Gate Angle	2	"	2½"x2½x3/8" Angle	—	—	—	—	—
D	"	12-17	×	21	" " ~~Catch~~ Pocket	8	882 B-7	Drilling Style 1	—	—	88-30	—	—
D	"	12-17	×	22	" " ~~Latch~~ " R	1	882 D-7	" " 3	—	—	88-30	—	—
D	"	12-17	×	23	" " ~~Hinge~~ " L	2	882 B-7	—	—	—	88-31	—	—
				24	" " " Lug								
				25	" " Chain								
				26	" " Eyebolt								
				27	" " Slide Clamp								
				28	" " Catch Bracket								
				29	" " Handle								
D	12/10	12-17	×	30	Tank Try Cock Pocket	3	882 A 104	1/4" Plate	—	—	—	—	—
				31	Tank Cut Out for Stoker								
D	12/10	12/15	×	32	Sprinkler Reservoir Bracket	1	889 B-45	—	63 B-119	—	—	—	—
P		✓		33	Tank Rivet Material		88 MO-135						
				34	Tank—Oil								
				35	" Material Bill								
				36	" Brace								
				37	" Lifter Iron								
				38	" Lug								
				39	" "								
				40	" Funnel								
				41	" " Lid								
				42	" " Hinge								
				43	" " " Lug								
				44	" " Screw								
				45	" " Handle								
				46	" " Gasket								
				47	" " Screen								
Q				48	Cab Curtain Fastener R L	1	234 C-51	1/8" Plate std Bent & Welded to Tank		—	—	—	—
				49									
				50	Coal Pusher								
D	12/10	12/17	×	51	Tank Screen Door Latch	6	882 A 103	—	88 A 152	—	—	—	—
D	"	12/17	×	52	" " " " Stop	6	"	—	88 A 153	—	—	—	—
D	12/18	12/20	×	53	Coal Pick & Shovel Hook	1	883 A 53	—	88 A 97	—	—	—	—
				54									
				55									
				56									
				57									
				58									
				59									
				60									
				61									

Schedule Dept. Check	Date Sent	Date Approved	Item	Title	No. Pcs.	Drawing Card No.	Drawing Construct'n Notes	Forgings Sketch No.	Castings—Pattern Numbers Cast Iron	Cast Steel	Brass	Mal. Iron
				GROUP 89—TENDER TRUCK								
D	12/10	12-17	1	Truck 6"x11	2	894 A 12	Vulcan	—	—	—	—	—
			2	" Arch Bar								
			3	" Truss Bar								
			4	" Tie Bar								
			5	" Columns								
			6	" "								
D	12/10	12-17	7	" Bolster	2	894 A 12	ASF-9821 ord	—	—	—	—	—
			8	" " Guide								
			9	" " Bar								
			10	" " Cap								
			11	" " Truss Rod								
			12	" " " " Washer								
D	12/10	12-17	13	" Center Plate	2	892 A 1	—	—	—	89-18	—	—
D	"	12-17	14	" King Bolt	2	892 C 9	—	892 C-9	—	—	—	—
D	"	12-17	15	" " " Keys	2	892 B-94	—	892 B-94	—	—	—	—
D	"	12-17	16	" Spring Plank	2	892 B-109	3/8" Plate ord	—	—	—	—	—
			17	" " Seat—Top	—							
D	12/10	12-17	18	" " " —Bottom	8	894 A 12	1/4"x4"x16 1/2" Plate	—	—	—	—	—
			19	" " Hanger								
			20	" " "								
			21	" " " Gib								
D	12/10	12-17	22	" Side Bearing	4	892 A 129	3/16" Clearance Each Side Rear 11/16 " " " Front	—	—	89-229	—	—
D	"	12-17	23	" " " Block	4	892 A 130	Shim for Clearance	—	—	89-228	—	—
D	"	12-17	24	" Frame	4	894 A 12	A.S.F. 8542 Kord	—	—	—	—	—
			25	" " Brace								
			26	" " Crosstie								
			27	" Pedestal								
			28	" "								
			29	" " Cap								
			30	" " " Tie								
			31	" Equalizer								
			32	" "								
			33	" Swing Frame								
			34	" " Link								
			35	" " Pins								
D	12/10	12-17	36	" Check Chain	6	892 A 37	R. of Front Truck Fa R of Rear "	892 A 37	—	—	—	—
D	"	12-17	37	" " " ~~Bolt~~	2	892 B-37	Fof Front "	892 B-37	—	—	—	—
			38	" " " Clevis								
			39	" " " Pocket								
			40									
			41									
			42									
			43									
			44									
			45									
			46									
			47									
			48									
			49									
			50									
			51									
			52									
			53									
			54									
			55									
			56									
			57									
			58									
			59									
			60									
			61									

SCHEDULE DEPT. | DATE SENT | DATE APPROVED

Checked	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 90—TENDER WATER SCOOP								
	1	Water Scoop								
	2	Scoop Cylinder								
	3	" " Head								
	4	" " "								
	5	" " Gland								
	6	" " Support								
	7	" " "								
	8	" Piston								
	9	" " Follower								
	10	" " Rings								
	11	" " Rod								
	12	" " " Jaws								
	13	" " " Extension Links								
	14	" Inside Pipe								
	15	" Outside Pipe								
	16	" Air Pipe Casing								
	17	" Neck								
	18	" Splash Hood								
	19	" Dipper								
	20	" " Link								
	21	" " Lifter								
	22	" " Nose								
	23	" " Shield								
	24	" " " Brackets								
	25	" Shaft								
	26	" " Fulcrum								
	27	" Bell Crank								
	28	" Arm								
	29	" Spring Cap								
	30	" " Rod								
	31	" " Seat								
	32	" " " Support								
	33	" Jaws								
	34	" Rods								
	35	" Lever								
	36	" Link								
	37	" Bracket								
	38	" Brace								
	39	" Pipe Hanger								
	40	" Joint Piece								
	41	" " " Trunion Cap								
	42	" " " " "								
	43	" " " Lifting Links								
	44	" " " " "								
	45	" Delivery Pipe Hanger								
	46	" " " " Clamp								
	47	" " " " Clips								
	48	"								
	49	"								
	50	" Operating Valve								
	51	" " " Cap								
	52	" " " Plug								
	53	" " " Nut								
	54	" " " Handle								
	55	" " " Quadrant								
	56	" " " Spring								
	57									
	58									
	59									
	60									
	61									

SCHEDULE DEPT. Check	DATE SENT	DATE APPROVED	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
				GROUP 95—WHEELS AND TIRES								
O	12/23	12/29	1	Truck Wheel	8	Carnegie Steel Co S-1132 Rolled		Steel ord	—	—	—	—
			2	Wheel Pressed on Axle (Tons)								
			3	Wheel Center								
			4	" Tire								
			5	Tire Retaining Ring								
			6	Wheel Numbers								
			7									
			8									
			9									
			10									
			11									
			12									
			13									
			14									
			15									
			16									
			17									
			18									
			19									
			20									
			21									
			22									
			23									
			24									
			25									
			26	GROUP ~~95~~ 86—MISCELLANEOUS								
	2/8	2/10	27	Tender Drawgear Arrgt		863 A 96	4 Tenders		—	—	—	—
	1/30	2/3	28	" Coupler	1	"	4 Tenders Natl. Malls St. Csdgs Co	Print # 10290 I	ord	—	—	—
	1/30	2/3	29	" " Pocket	1	"	4 Tenders " " "	" 27632-B	ord	—	—	—
	1/30	2/3	30	" Buffer	1	"	4 Tenders " " "	" 27632-B-	ord	—	—	—
	2/8	2/10	31	" Coupler Chain	1	"	4-Tenders Natl Malls St Co					
	2/8	2/10	32	" Uncoupling Shaft	1	862 A 119	4-Tenders	862 A-119	—	—	—	—
	2/8	2/10	33	" " Shaft Brkts	2 ✓	372 B A-435	4 Tenders	—	—	37-439-A	—	—
	2/8	2/10	34	" " " "	2 ✓	862 A 71	4 Tenders	—	—	86-45	—	—
	1/11	1/14	35	" " " Handle	2 ✓	862 A 69	4 Tenders	—	—	86-21	—	—
	1/11	1/14	36	" " " Cap	2 ✓	"	4 Tenders	—	—	86-22	—	—
			37									
			38									
			39									
			40									
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Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron

Material Specifications